

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

Jean-Louis Baffier, et al.

Serial No.: 09/872,235

Filed: May 31, 2001

For: TECHNIQUES FOR AUTOMATICALLY  
PROVISIONING A DATABASE OVER  
A WIDE AREA NETWORK

) Confirmation No.: 2420

) Group Art No.: 2167

) Examiner: Miranda Le

**COPY**

**Mail Stop AF**  
Commissioner for Patents  
P. O. Box 1450  
Alexandria, VA 22313-1450

**AMENDMENT AFTER FINAL**

Sir:

This is in response to the Final Office Action mailed May 20, 2005, the two-month period for which runs until July 20, 2005. Applicants respectfully request entry of the following amendments and reconsideration of the patent application in view of the following remarks.

**Amendments to the Claims** are reflected in the listing of claims on page 2 of this paper.

**Remarks** begin on page 24 of this paper.

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**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

- 1     1.     (Currently amended) A method for provisioning databases for users on a ~~wide-area~~  
2           network, the method comprising the steps of:  
3           a first party managing one or more database systems;  
4           a plurality of second parties subscribing to database services supported by the one  
5           or more database systems managed by the first party, wherein the database  
6           services include services for storing and managing data provided by the  
7           second parties; and  
8           providing, over a the network, to database applications controlled by the second  
9           parties, access to the database services to which the second parties are  
10          subscribed,  
11          wherein the database applications, controlled by the second parties, interact with  
12          the database systems managed by the first party by sending, from the second  
13          parties, to the database systems, over the network, database commands that  
14          conform to the database language supported by the database system, and  
15          wherein execution of the database commands allows the second parties to  
16          manipulate data objects stored within at least one of the one or more  
17          database systems, and

18 wherein the second parties control the source code of the database applications that  
19 the second parties use the send database commands to the database  
20 management systems managed by the first parties.

1 2. (Original) The method of claim 1 wherein:  
2 at least one of said second parties is an application service provider that provides  
3 application services to a plurality of third parties over said network; and  
4 the step of providing access to the database services includes providing database  
5 services to an application used by said application service provider to  
6 provide said application services to said third parties.

1 3. (Original) The method of claim 1 further comprising the steps of:  
2 receiving over said network a request to perform a database management operation  
3 from a user associated with a particular second party of said plurality of  
4 second parties; and  
5 responding to said request by performing said database management operation on  
6 one or more databases controlled by said first party without human  
7 intervention by said first party.

1 4. (Original) The method of claim 1 wherein the one or more database systems are  
2 implemented on a set of database devices that include a plurality of database  
3 appliances, a database appliance comprising database software and non-database  
4 software tailored to the needs of the database software.

- 1 5. (Original) The method of claim 1 wherein the step of providing access over a  
2 network includes providing access over a public network of computer networks.
- 1 6. (Original) The method of claim 3 wherein the step of performing the database  
2 management operation involves allocating a different amount of resources to said  
3 particular second party than is currently allocated for said particular second party.
- 1 7. (Original) The method of claim 1, further comprising the step of delivering to a  
2 party over the network one or more messages which cause generation of user  
3 interfaces that allow the party to subscribe to said database services provided by  
4 said first party.
- 1 8. (Original) The method of claim 7 wherein the user interfaces contain controls for  
2 specifying user profile information, payment information, and selection of database  
3 services.
- 1 9. (Original) The method of claim 1, further comprising the step of delivering over the  
2 network, to a user associated with one of said second parties, one or more messages  
3 which cause generation of user interfaces that allow the user to access a database  
4 for a database service to which said one of said second parties has subscribed.
- 1 10. (Original) The method of claim 1, wherein:  
2 the first party also provides database application services over said network; and  
3 the method further comprises the step of delivering over the network, to a user  
4 associated with one of said second parties, one or more messages which

5                   cause generation of user interfaces that allow the user to access a database  
6                   application service to which said one of said second parties has subscribed.

1    11.    (Original) The method of claim 1, further comprising the step of delivering over the  
2           network, to a user associated with one of said second parties, one or more messages  
3           which cause generation of user interfaces that allow the user to indicate changes to  
4           at least one of profile information, payment information, and the selection of  
5           services to which said one of said second parties is subscribed.

1    12.    (Original) The method of claim 1, further comprising the step of delivering over the  
2           network, to a user associated with one of said second parties, one or more messages  
3           which cause generation of user interfaces that allow the user to supply content for a  
4           subscribed database.

1    13.    (Original) The method of claim 1, further comprising the step of delivering over the  
2           network, to a user associated with one of said second parties, one or more messages  
3           which cause generation of user interfaces that allow the user to develop a new  
4           database application.

1    14.    (Original) The method of claim 1, further comprising the step of delivering over the  
2           network, to a user associated with one of said second parties, one or more messages  
3           which cause generation of user interfaces that allow the user to integrate an external  
4           service.

1 15. (Original) The method of claim 1, further comprising the step of delivering over the  
2 network, to a user associated with one of said second parties, one or more messages  
3 which cause generation of user interfaces that present a status of a user subscribed  
4 resource selected from database resources managed by said first party.

1 16. (Original) The method of claim 1, further comprising the steps of:  
2 delivering over the network, to a user associated with one of said second parties,  
3 one or more messages which cause generation of user interfaces that present  
4 the user with a user-selectable representation of a wizard for building a Web  
5 page with a database component associated with an interface to a database;  
6 receiving user input indicating the wizard; and  
7 executing said wizard, including presenting a series of screens to the user to prompt  
8 user input for building the Web page.

1 17. (Original) The method of claim 1, further comprising the step of the first party  
2 updating the one or more database systems by receiving from a community server  
3 over the network an update to the one or more database systems, wherein the  
4 community server provides the update to a plurality of service providers over said  
5 network.

1 18. (Original) The method of claim 1, further comprising the step of the first party  
2 sending to a community server a status of a user subscribed resource, wherein the  
3 user subscribed resource is maintained by said first party.

1 19. (Original) The method of claim 1, further comprising presenting to a user  
2 associated with said first party a user interface to allow said first party to configure  
3 a database device used to provide said database services as one of a dedicated  
4 device and a plurality of virtual devices.

1 20. (Original) The method of claim 1, further comprising presenting to a user  
2 associated with said first party a user interface to allow said first party to configure  
3 at least one of a dedicated device and a virtual device of a plurality of virtual  
4 devices as one of a staging device available only to a database service developer for  
5 developing database services, and a production device for making database services  
6 available to a user who is not the database service developer.

1 21. (Original) The method of claim 20, further comprising presenting a user interface  
2 for transferring an application from a staging device to a production device.

1 22. (Original) The method of claim 7 wherein:  
2 the step of delivering to a party over the network one or more messages which  
3 cause generation of user interfaces that allow the party to subscribe to said  
4 database services is performed as part of a registration process;  
5 the interfaces include controls for receiving a user input value for a maximum  
6 amount of subscribed resources; and  
7 the method further includes the step of presenting an alert if an amount of  
8 subscribed resources consumed by said party exceeds a threshold  
9 percentage of the maximum amount of subscribed resources.

1 23. (Original) The method of claim 22, further comprising the steps of:  
2 receiving a user input value for a particular threshold percentage; and  
3 presenting an alert if an amount of resources consumed by said party exceeds the  
4 particular threshold percentage of the maximum amount of subscribed  
5 resources.

1 24. (Original) The method of claim 22, wherein the maximum amount of subscribed  
2 resources includes a maximum amount of at least one of  
3 an amount of storage space,  
4 a number of users connected to a platform in a period of time,  
5 an amount of processor time used in a period of time, and  
6 a number of transactions completed in a period of time.

1 25. (Original) The method of claim 12, further comprising the steps of:  
2 presenting to the user a set of selectable sources of content;  
3 receiving user input indicating a selected source; and  
4 launching a source update process to connect to the selected source and update a  
5 database with information received from the selected sources.

1 26. (Original) The method of claim 25, wherein  
2 the user input indicating a selected source also indicates a schedule for updating  
3 from the selected source; and  
4 the source update process connects to the selected source according to the schedule  
5 for updating from the selected source.



1 27. (Original) The method of claim 12, further comprising the steps of:  
2 in response to user input that specifies that data should be loaded into a subscribed  
3 database, determining whether the subscribed database currently exists for  
4 said one of said second parties; and  
5 creating the subscribed database if the subscribed database does not currently exist  
6 for said one of said second parties.

1 28. (Original) The method of claim 13, further comprising the steps of:  
2 presenting representations of selectable application development kits;  
3 receiving user input indicating a selected development kit from the user; and  
4 launching a staging process including  
5 configuring consumable database resources on a staging database device, wherein a  
6 staging database device can be accessed by the user for developing the new  
7 database application and cannot be accessed by users associated with other  
8 parties of said plurality of second parties,  
9 receiving development input from the user; and  
10 building a new application on the staging database device based on the selected  
11 development kit and the development input.

1 29. (Original) The method of claim 28, the step of developing the new database  
2 application further comprising the steps of

3 after receiving user input indicating a selected development kit, determining  
4 whether a client process of the selected development kit must be  
5 downloaded to a computer of the user over the wide area network; and  
6 if it is determined the client process of the selected development kit must be  
7 downloaded, downloading the client process to the computer of the user  
8 over the wide area network before the step of building the new application.

1 30. (Original) The method of claim 28, the step of developing a new database  
2 application further comprising the steps of:  
3 receiving input from the user indicating the new application is ready for operational  
4 use; and  
5 in response to receiving input from the user indicating the new application is ready  
6 for operational use, launching a production transfer process including  
7 sending a request to the first party to transfer the new application to a  
8 production device on which the new application may be accessed by users  
9 who did not develop the new application.

1 31. (Original) The method of claim 14, further comprising integrating the external  
2 service, wherein the step of integrating comprises the steps of:  
3 presenting a representation of a selectable external service;  
4 receiving user input indicating a selected external service; and  
5 launching an integration process to provide the external service to the user.

1 32. (Original) The method of claim 31, wherein the selectable external service includes  
2 at least one of a payment service, a mobile Internet portal, an enterprise resource  
3 planning application, and a customer relationship management application.

1 33. (Original) The method of claim 1, further comprising the first party performing at  
2 least one of the steps of:  
3 setting up database parameters;  
4 reporting database usage;  
5 backing up the database;  
6 upgrading the database;  
7 controlling database versions;  
8 implementing database security; and  
9 implementing data security within the database.

1 34. (Original) The method of claim 1, further comprising the steps of:  
2 if a costing database does not already exist, then  
3 automatically creating the costing database of database resource usage by user, and  
4 initiating a costing model with price per unit of consumable resource per service;  
5 inserting data into the costing database based on actual use of database resources by  
6 the user;  
7 executing the costing model to compute a cost-per-user based on the data in the  
8 costing database and the price per unit of consumable resource per service;  
9 and

10 billing the user for the cost computed by the costing model.

1 35. (Previously presented) The method of claim 34, wherein the costing model  
2 supports:  
3 fixed price per unit of usage;  
4 variable price per unit usage as a function of usage;  
5 flat price up to a maximum value of usage;  
6 different prices for different users;  
7 different prices for different services; and  
8 different prices for increments of usage above a maximum subscribed usage.

1 36. (Currently amended) A computer-readable medium carrying instructions for  
2 provisioning databases for users on a ~~wide-area~~ network, the instructions  
3 comprising instructions for performing the steps of:  
4 a first party managing one or more database systems;  
5 a plurality of second parties subscribing to database services supported by the one  
6 or more database systems managed by the first party, wherein the database  
7 services include services for storing and managing data provided by the  
8 second parties; and  
9 providing, over a the network, to database applications controlled by the second  
10 parties, access to the database services to which the second parties are  
11 subscribed,  
12 wherein the database applications, controlled by the second parties, interact with  
13 the database systems managed by the first party by sending, from the second

14                    parties, to the database systems, over the network, database commands that  
15                    conform to the database language supported by the database system, ~~and~~  
16                    wherein execution of the database commands allows the second parties to  
17                    manipulate data objects stored within at least one of the one or more  
18                    database systems, and  
19                    wherein the second parties control the source code of the database applications that  
20                    the second parties use the send database commands to the database  
21                    management systems managed by the first parties.

1    37.    (Original) The computer-readable medium of claim 36 wherein:  
2                    at least one of said second parties is an application service provider that provides  
3                    application services to a plurality of third parties over said network; and  
4                    the step of providing access to the database services includes providing database  
5                    services to an application used by said application service provider to  
6                    provide said application services to said third parties.

1    38.    (Original) The computer-readable medium of claim 36 further comprising  
2                    instructions for performing the steps of:  
3                    receiving over said network a request to perform a database management operation  
4                    from a user associated with a particular second party of said plurality of  
5                    second parties; and

6        responding to said request by performing said database management operation on  
7                one or more databases controlled by said first party without human  
8                intervention by said first party.

1    39.    (Original) The computer-readable medium of claim 36 wherein the one or more  
2                database systems are implemented on a set of database devices that include a  
3                plurality of database appliances, a database appliance comprising database software  
4                and non-database software tailored to the needs of the database software.

1    40.    (Original) The computer-readable medium of claim 36 wherein the step of  
2                providing access over a network includes providing access over a public network of  
3                computer networks.

1    41.    (Original) The computer-readable medium of claim 38 wherein the step of  
2                performing the database management operation involves allocating a different  
3                amount of resources to said particular second party than is currently allocated for  
4                said particular second party.

1    42.    (Original) The computer-readable medium of claim 36, further comprising  
2                instructions for performing the step of delivering to a party over the network one or  
3                more messages which cause generation of user interfaces that allow the party to  
4                subscribe to said database services provided by said first party.

1 43. (Original) The computer-readable medium of claim 42 wherein the user interfaces  
2 contain controls for specifying user profile information, payment information, and  
3 selection of database services.

1 44. (Original) The computer-readable medium of claim 36, further comprising  
2 instructions for performing the step of delivering over the network, to a user  
3 associated with one of said second parties, one or more messages which cause  
4 generation of user interfaces that allow the user to access a database for a database  
5 service to which said one of said second parties has subscribed.

1 45. (Original) The computer-readable medium of claim 36, wherein:  
2 the first party also provides database application services over said network; and  
3 the computer-readable medium further comprises instructions for performing the  
4 step of delivering over the network, to a user associated with one of said  
5 second parties, one or more messages which cause generation of user  
6 interfaces that allow the user to access a database application service to  
7 which said one of said second parties has subscribed.

1 46. (Original) The computer-readable medium of claim 36, further comprising  
2 instructions for performing the step of delivering over the network, to a user  
3 associated with one of said second parties, one or more messages which cause  
4 generation of user interfaces that allow the user to indicate changes to at least one

5 of profile information, payment information, and the selection of services to which  
6 said one of said second parties is subscribed.

1 47. (Original) The computer-readable medium of claim 36, further comprising  
2 instructions for performing the step of delivering over the network, to a user  
3 associated with one of said second parties, one or more messages which cause  
4 generation of user interfaces that allow the user to supply content for a subscribed  
5 database.

1 48. (Original) The computer-readable medium of claim 36, further comprising  
2 instructions for performing the step of delivering over the network, to a user  
3 associated with one of said second parties, one or more messages which cause  
4 generation of user interfaces that allow the user to develop a new database  
5 application.

1 49. (Original) The computer-readable medium of claim 36, further comprising  
2 instructions for performing the step of delivering over the network, to a user  
3 associated with one of said second parties, one or more messages which cause  
4 generation of user interfaces that allow the user to integrate an external service.

1 50. (Original) The computer-readable medium of claim 36, further comprising  
2 instructions for performing the step of delivering over the network, to a user  
3 associated with one of said second parties, one or more messages which cause



4 generation of user interfaces that present a status of a user subscribed resource  
5 selected from database resources managed by said first party.

1 51. (Original) The computer-readable medium of claim 36, further comprising  
2 instructions for performing the steps of:  
3 delivering over the network, to a user associated with one of said second parties,  
4 one or more messages which cause generation of user interfaces that present  
5 the user with a user-selectable representation of a wizard for building a Web  
6 page with a database component associated with an interface to a database;  
7 receiving user input indicating the wizard; and  
8 executing said wizard, including presenting a series of screens to the user to prompt  
9 user input for building the Web page.

1 52. (Original) The computer-readable medium of claim 36, further comprising  
2 instructions for performing the step of the first party updating the one or more  
3 database systems by receiving from a community server over the network an update  
4 to the one or more database systems, wherein the community server provides the  
5 update to a plurality of service providers over said network.

1 53. (Original) The computer-readable medium of claim 36, further comprising  
2 instructions for performing the step of the first party sending to a community server  
3 a status of a user subscribed resource, wherein the user subscribed resource is  
4 maintained by said first party.

1     54.     (Original) The computer-readable medium of claim 36, further comprising  
2             instructions for presenting to a user associated with said first party a user interface  
3             to allow said first party to configure a database device used to provide said  
4             database services as one of a dedicated device and a plurality of virtual devices.

1     55.     (Original) The computer-readable medium of claim 36, further comprising  
2             instructions for presenting to a user associated with said first party a user interface  
3             to allow said first party to configure at least one of a dedicated device and a virtual  
4             device of a plurality of virtual devices as one of a staging device available only to a  
5             database service developer for developing database services, and a production  
6             device for making database services available to a user who is not the database  
7             service developer.

1     56.     (Original) The computer-readable medium of claim 55, further comprising  
2             instructions for presenting a user interface for transferring an application from a  
3             staging device to a production device.

1     57.     (Original) The computer-readable medium of claim 42 wherein:  
2             the step of delivering to a party over the network one or more messages which  
3                         cause generation of user interfaces that allow the party to subscribe to said  
4                         database services is performed as part of a registration process;  
5             the interfaces include controls for receiving a user input value for a maximum  
6                         amount of subscribed resources; and

7 the computer-readable medium further includes instructions for the step of  
8 presenting an alert if an amount of subscribed resources consumed by said  
9 party exceeds a threshold percentage of the maximum amount of subscribed  
10 resources.

1 58. (Original) The computer-readable medium of claim 57, further comprising  
2 instructions for performing the steps of:  
3 receiving a user input value for a particular threshold percentage; and  
4 presenting an alert if an amount of resources consumed by said party exceeds the  
5 particular threshold percentage of the maximum amount of subscribed  
6 resources.

1 59. (Original) The computer-readable medium of claim 57, wherein the maximum  
2 amount of subscribed resources includes a maximum amount of at least one of  
3 an amount of storage space,  
4 a number of users connected to a platform in a period of time,  
5 an amount of processor time used in a period of time, and  
6 a number of transactions completed in a period of time.

1 60. (Original) The computer-readable medium of claim 47, further comprising  
2 instructions for performing the steps of:  
3 presenting to the user a set of selectable sources of content;  
4 receiving user input indicating a selected source; and

5 launching a source update process to connect to the selected source and update a  
6 database with information received from the selected sources.

1 61. (Original) The computer-readable medium of claim 60, wherein  
2 the user input indicating a selected source also indicates a schedule for updating  
3 from the selected source; and  
4 the source update process connects to the selected source according to the schedule  
5 for updating from the selected source.

1 62. (Original) The computer-readable medium of claim 47, further comprising  
2 instructions for performing the steps of:  
3 in response to user input that specifies that data should be loaded into a subscribed  
4 database, determining whether the subscribed database currently exists for  
5 said one of said second parties; and  
6 creating the subscribed database if the subscribed database does not currently exist  
7 for said one of said second parties.

1 63. (Original) The computer-readable medium of claim 48, further comprising  
2 instructions for performing the steps of:  
3 presenting representations of selectable application development kits;  
4 receiving user input indicating a selected development kit from the user; and  
5 launching a staging process including  
6 configuring consumable database resources on a staging database device, wherein a  
7 staging database device can be accessed by the user for developing the new

8 database application and cannot be accessed by users associated with other  
9 parties of said plurality of second parties,  
10 receiving development input from the user; and  
11 building a new application on the staging database device based on the selected  
12 development kit and the development input.

1 64. (Original) The computer-readable medium of claim 63, the step of developing the  
2 new database application further comprising the steps of  
3 after receiving user input indicating a selected development kit, determining  
4 whether a client process of the selected development kit must be  
5 downloaded to a computer of the user over the wide area network; and  
6 if it is determined the client process of the selected development kit must be  
7 downloaded, downloading the client process to the computer of the user  
8 over the wide area network before the step of building the new application.

1 65. (Original) The computer-readable medium of claim 63, the step of developing a  
2 new database application further comprising the steps of:  
3 receiving input from the user indicating the new application is ready for operational  
4 use; and  
5 in response to receiving input from the user indicating the new application is ready  
6 for operational use, launching a production transfer process including  
7 sending a request to the first party to transfer the new application to a  
8 production device on which the new application may be accessed by users  
9 who did not develop the new application.

1 66. (Original) The computer-readable medium of claim 49, further comprising  
2 instructions for integrating the external service, wherein the step of integrating  
3 comprises the steps of:  
4 presenting a representation of a selectable external service;  
5 receiving user input indicating a selected external service; and  
6 launching an integration process to provide the external service to the user.

1 67. (Original) The computer-readable medium of claim 66, wherein the selectable  
2 external service includes at least one of a payment service, a mobile Internet portal,  
3 an enterprise resource planning application, and a customer relationship  
4 management application.

1 68. (Original) The computer-readable medium of claim 36, further comprising  
2 instructions for the first party performing at least one of the steps of:  
3 setting up database parameters;  
4 reporting database usage;  
5 backing up the database;  
6 upgrading the database;  
7 controlling database versions;  
8 implementing database security; and  
9 implementing data security within the database.

1 69. (Original) The computer-readable medium of claim 36, further comprising  
2 instructions for performing the steps of:

3 if a costing database does not already exist, then  
4 automatically creating the costing database of database resource usage by user, and  
5 initiating a costing model with price per unit of consumable resource per service;  
6 inserting data into the costing database based on actual use of database resources by  
7 the user;  
8 executing the costing model to compute a cost-per-user based on the data in the  
9 costing database and the price per unit of consumable resource per service;  
10 and  
11 billing the user for the cost computed by the costing model.

1 70. (Previously presented) The computer-readable medium of claim 69, wherein the costing  
2 model supports:  
3 fixed price per unit of usage;  
4 variable price per unit usage as a function of usage;  
5 flat price up to a maximum value of usage;  
6 different prices for different users;  
7 different prices for different services; and  
8 different prices for increments of usage above a maximum subscribed usage.

## REMARKS

By this amendment, Claims 1 and 36 have been amended. No claims have been amended, added, or cancelled. Hence, Claims 1-70 are pending in the application.

## FILED IDS HAVE NOT BEEN ACKNOWLEDGED

The Applicants have filed Information Disclosure Statements (individually a “IDS”) on September 17, 2003, October 27, 2004, November 9, 2004, February 4, 2005, and May 12, 2005 (collectively the “unacknowledged IDSs”). However, the Applicants have not yet received an initialed form PTO-1449 acknowledging the receipt and consideration of the unacknowledged IDSs. Consequently, the Applicants respectfully request an initialed form PTO-1449 acknowledging the receipt and consideration of the unacknowledged IDSs.

## SUMMARY OF THE REJECTIONS

Claims 1-6, 17-21, 33-34, 36-41, 52-56, and 68-69 were rejected under 35 U.S.C. § 102(e) as allegedly being unpatentable over U.S. Patent No. 6,345,278 issued to Hitchcock et al. (“*Hitchcock*”). Claims 7-16, 25, 27-32, 42-51, 60, and 62 were rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over *Hitchcock* in view of U.S. Patent Application Number 2001/0011274 A1 by Klug et al. (“*Klug*”).

The rejections are respectfully traversed.

## CLAIM 1 IS PATENTABLE OVER THE CITED ART

Claim 1 features the elements of:

“a first party managing one or more database systems;  
a plurality of second parties subscribing to database services supported by the  
one or more database systems managed by the first party, wherein the



database services include services for storing and managing data provided by the second parties; and providing, over the network, to database applications controlled by the second parties, access to the database services to which the second parties are subscribed, wherein the database applications, controlled by the second parties, interact with the database systems managed by the first party by sending, from the second parties, to the database systems, over the network, database commands that conform to the database language supported by the database system, wherein execution of the database commands allows the second parties to manipulate data objects stored within at least one of the one or more database systems, and where the second parties control the source code of the database applications that the second parties use to send database commands to the database systems managed by the first parties.” (emphasis added)

At least the above-underlined features of Claim 1 are not disclosed, taught, or suggested by *Hitchcock*.

Claim 1 is directed towards provisioning databases for users on network. In the approach of Claim 1, a first party manages one or more database systems. **A plurality of second parties subscribe to database services** supported by the one or more database systems being managed by the first party. **The database services include services for storing and managing data provided by the second parties.** Database applications controlled by the second parties are provided access to the database services to which the second parties are subscribed. **The database applications interact with the database systems** managed by the first party **by sending, to the database systems, database commands** that conform to the database language supported by the database system. **When the database commands are executed by the first party, the second parties may manipulate data objects stored within at least one of the one or more database systems.** Significantly, such an approach allows the second parties to avoid the cost and frustration of managing and maintaining a database system, while still providing to the second parties the ability to store data in a database system managed

by the first party, and to manipulate data objects stored within a database system managed by the first party.

On the other hand, *Hitchcock* is directed towards providing a universal forms engine, accessed by a web browser, which allows data to be shared between customizable on-line forms, such as college admissions applications. After a college applicant completes an application, the data is saved in a database. The data may be automatically populated in fields of subsequent application forms (Abstract; Col. 3, line 55 – Col. 4, line 12). A different party (namely the third party application servicer 24) than the college applicants and the institutions maintains the database, but the third party application servicer 24 provides, to the college applicants and the institutions, access to the information stored in the database through the universal forms engine.

The forms engine of *Hitchcock* is accessed by a web browser (See Col. 16, lines 49-50; Col. 4, lines 66-67; Col. 6, lines 40-43). *Hitchcock* teaches that the forms engine converts the application information into a format compatible with the institution's internal databases and delivers the information to the institution's database (Col. 7, lines 13-16). *Hitchcock* further teaches that a contact person of an institution may use administrative utilities on the forms engine to upload data (Col. 21, lines 6-12). Thus, *Hitchcock* teaches that the institution computers (28 on FIG. 1) communicate with server 16 and the secure data storage 26 over the World Wide Web (WWW) (See Col. 3, lines 55-Col. 4, line 12). Importantly, there is no suggestion in *Hitchcock* that the institutions interact with secure data storage 26 **using database applications controlled by the institutions**. As a result, numerous elements of Claim 1 are not disclosed, taught, or suggested by *Hitchcock*. In fact, because the institutions use a web browser, it is implicit that the forms engine resides on the server-side of the communication. The fact that the forms engine is not controlled by the institution is further

supported by FIG. 15, and the fact that the forms engine is preferably implemented as a CGI program (See Col. 5, lines 53 to 55).

For example, Claim 1 features the element of “wherein execution of the database commands allows the second parties to manipulate data objects stored within at least one of the one or more database systems.” The Office Action provided no explanation as to why this element of Claim 1 is shown by *Hitchcock*. As mentioned above, the database application of *Hitchcock* is not controlled by the institutions. The software that is controlled by the institutions (the web browser) does not send database commands to a database server. As a result, there are no reasons on the record as to why *Hitchcock* allegedly teaches this element. Further, it is noted that *Hitchcock* teaches away from this element by requiring that the institutions operating institution computers 28 interact with secure data storage 26 via a web browser. Thus, the institutions cannot themselves submit database commands, to a database system maintained by the third party application servicer 24, to manipulate data objects stored within the database system. As a result, it is respectfully submitted that this element is not disclosed, taught, or suggested by *Hitchcock*.

Further, Claim 1 features the element of “providing, over a network, to database applications controlled by the second parties, access to the database services to which the second parties are subscribed.” As explained above, *Hitchcock* teaches away from this element by requiring that the institutions operating institution computers 28 interact with secure data storage 26 via a web browser. The portion of *Hitchcock* cited to show this element (Institutions’ database at Col. 7, line 16; Col. 4, line 64 to Col. 5, line 12; Col. 6, line 65 to Col. 7, line 17) merely discusses (a) institutions have their own database separate from secure data storage 26, (b) applicants use a web browser to upload information to the secure data storage

26, and, (c) sending information from the application database 62, maintained by the third party application servicer 24, to an institution database maintained by an institution.

However, nothing in this portion suggests that the institutions use a database application to access data in secure data storage 26. In sharp contrast, this portion clearly teaches away from this element by the teaching that the forms engine converts information stored in the application database 62 into a form compatible with the institutions database, and thereafter delivers the converted information to the institution database maintained by the institutions. The institutions cannot directly access the secure data storage 26 (perhaps why *Hitchcock* termed it the “secure” data storage 26). Indeed, the forms engine, which *Hitchcock* teaches is accessed by entering a URL in a web browser (Col. 16, lines 49-50), maintains permission information to restrict the access of people (“institution workers”) within the institution (Col. 12, lines 48-67). Thus, the institution workers do not use database applications to access the secure data storage 26, but rather, the institution workers access information stored in the secure data storage 26 using a web browser that interacts with the forms engine in accordance with the permissions granted to the institution workers by the third party application servicer 24. Consequently, this element is also not disclosed, taught, or suggested by *Hitchcock*.

Moreover, Claim 1 features the element of “wherein the database applications, controlled by the second parties, interact with the database systems managed by the first party by sending, to the database systems, database commands that conform to the database language supported by the database system.” In sharp contrast to the requirements of this element, the institutions do not access secure data storage 26 using database applications, but instead, access data maintained by the secure data storage 26 through the forms engine which is accessed using a web browser. As a result, a institution computer 28 does not send, to a database system, database commands that conform to the database language supported by the database system;

instead, an institution worker uses a web browser to cause institution computer 28 to interact with web server software, executing on server 16, that coordinates communications with the form engine (Col. 3, line 65 – Col. 4, line 2). Consequently, this element is also not disclosed, taught, or suggested by *Hitchcock*.

Claim 1 has been amended herein to clarify what is meant by “control,” in the context of controlling a database application, as it appears the rejection of the Office Action may be based on an incorrect interpretation of control in this context. Specifically, Claim 1 recites the feature of “wherein the second parties control the source code of the database applications that the second parties use to send database commands to the database systems managed by the first parties.” This feature is not disclosed, taught, or suggested by *Hitchcock*.

As at least one element recited in Claim 1 is not disclosed, taught, or suggested by *Hitchcock*, it is respectfully submitted that Claim 1 is patentable over the cited art and is in condition for allowance.

#### **CLAIMS 2-70 ARE PATENTABLE OVER THE CITED ART**

Independent Claim 36 recites features that are similar to those discussed above with respect to Claim 1, except that Claim 36 is recited in computer-readable medium format. Consequently, for at least the reasons given above with respect to Claim 1, it is respectfully submitted that Claim 36 is also patentable over the cited art and is in condition for allowance.

Claims 2-35 and 37-70 are dependent claims, each of which depends (directly or indirectly) on one of the claims discussed above. Each of Claims 2-35 and 37-70 is therefore allowable for the reasons given above for the claim on which it depends. In addition, each of Claims 2-35 and 37-70 introduces one or more additional limitations that independently render it patentable. However, due to the fundamental differences already identified, to expedite the

positive resolution of this case a separate discussion of those limitations is not included at this time, although the Applicants reserve the right to further point out the differences between the cited art and the novel features recited in the dependent claims.

## CONCLUSION

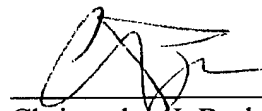
For the reasons set forth above, it is respectfully submitted that all of the pending claims are now in condition for allowance. Therefore, the issuance of a formal Notice of Allowance is believed next in order, and that action is most earnestly solicited.

The Examiner is respectfully requested to contact the undersigned by telephone if it is believed that such contact would further the examination of the present application.

To the extent necessary, a petition for an extension of time under 37 C.F.R. § 1.136 is hereby made. Please charge any fee shortages or credit any overages to Deposit Account No. 50-1302.

Respectfully submitted,

HICKMAN PALERMO TRUONG & BECKER LLP

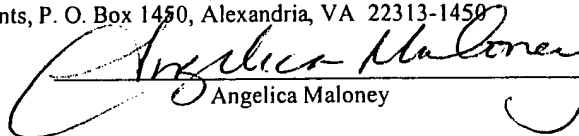
  
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